AMENDMENTS TO THE CLAIMS

Please amend the present application as follows:

Claims

Claim 1 (Currently amended): A communications module, comprising:

a host interface port connectable to a media access control interface of a host system;

a network medium interface port connectable to a network medium; ~~and~~

a protocol handler operable to identify a communication protocol compatible with the host system and to adaptively self-configure communications between the host interface port and the network medium interface port in accordance with the identified compatible communications protocol; and

a transceiver operable together with the protocol handler to transition communications from the media access control interface sequentially through the host interface port, the protocol handler, the transceiver, and the network medium interface port.

Claim 2 (original): The communications module of claim 1, wherein the protocol handler is operable to identify the compatible communications protocol based on at least one signal received through the host interface port.

Claim 3 (Previously presented): The communications module of claim 1, wherein the protocol handler is operable to detect a data rate of a signal received from the host system through the host interface port and to identify the compatible communications protocol based on the detected data rate.

Claim 4 (Previously presented): The communications module of claim 3, wherein the protocol handler comprises a frequency detector configured to detect the data rate of the signal received from the host system through the host interface port.

Claim 5 (Previously presented): The communications module of claim 1, wherein the protocol handler is operable to recognize a pattern in a signal received from the host system through the host interface port and identify the compatible communications protocol based on the recognized pattern.

Claim 6 (Previously presented): The communications module of claim 5, wherein the protocol handler is operable to recognize the pattern in a data frame of the signal received from the host system through the host interface port.

Claim 7 (Previously presented): The communications module of claim 5, wherein the pattern is an auto-initialization pattern in the signal received from the host system through the host interface port, and the protocol handler is operable to recognize the auto-negotiation initialization pattern.

Claim 8 (Previously presented): The communications module of claim 1, wherein the protocol handler is operable to auto-negotiate the compatible communications protocol with the host system.

Claim 9 (Previously presented): The communications module of claim 8, wherein the protocol handler is operable to obtain from the host system initial handshaking information specifying the compatible communications protocol.

Claim 10 (original): The communications module of claim 9, wherein the protocol handler is operable to transfer the initial handshaking information to a link partner connected to the network medium.

Claim 11 (Previously presented): The communications module of claim 10, wherein the protocol handler is operable to auto-negotiate the compatible communications protocol with the link partner.

Claim 12 (Previously presented): The communications module of claim 11, wherein the protocol handler is operable to adaptively self-configure the communications between the host interface port and the network medium interface port in accordance with the auto-negotiated communications protocol compatible with both the host system and the link partner.

Claim 13 (Currently amended): A communications method, comprising:

coupling to a first host system, a self-configuring communications module that is adaptive to a variety of host systems;

operating an adaptive protocol handler of the communications module to identify ~~identifying~~ a first communications protocol ~~compatible with a~~ used by the first host system; and

~~adaptively self-configuring~~ further operating the adaptive protocol handler for establishing communications between a host interface port of ~~a~~ the communications module and a network medium interface port of the communications module using the identified first communications protocol, thereby providing communications connectivity between the first host system and a network device that is communicatively coupled to the network medium interface port. ~~in accordance with the identified compatible communications protocol.~~

Claim 14-15. (Canceled)

Claim 16 (Previously presented): The communications method of claim 13, wherein the identifying comprises recognizing a pattern in a signal received from the host system through the host interface port, and identifying the compatible communications protocol based on the recognized pattern.

17 (Canceled)

Claim 18 (Previously presented): The communications method of claim 16, wherein the pattern is an auto-negotiation initialization pattern in the signal received from the host system through the host interface port, and the identifying comprises recognizing the auto-negotiation initialization pattern and identifying the compatible communications protocol from the recognized auto-negotiation initialization pattern.

Claim 19 (Previously presented): The communications method of claim 13, further comprising auto-negotiating the compatible communications protocol with the host system.

Claim 20 (Previously presented): The communications method of claim 19, wherein the auto-negotiating comprises obtaining from the host system initial handshaking information specifying the compatible communications protocol.

Claim 21-22 (Canceled)

Claim 23 (New): The communications method of claim 13, wherein coupling to the first host system comprises coupling the host interface port of the communications module to a media access control interface of the first host system, and further wherein providing connectivity between the first host system and the network device comprises providing connectivity from the media access control interface sequentially through the host interface port, the protocol handler, a transceiver of the communications module, and the network medium interface port.

Claim 24 (New): The communications method of claim 13, further comprising:

inserting the self-configuring communications module into a second host system that is different than the first host system;

operating the adaptive protocol handler of the communications module to identify a second communications protocol used by the second host system, wherein the second communications protocol is different than the first communications protocol; and

operating the adaptive protocol handler for establishing communications between the host interface port of the communications module and the network medium interface port of the communications module using the identified second communications protocol, thereby providing communications connectivity between the second host system and the network device that is communicatively coupled to the network medium interface port.

Claim 25 (New): A self-configuring communications module that is adaptive to a variety of host systems, the communications module comprising:

a host interface port configured for coupling the communications module to a host communications controller of a first host system;

a network media interface port configured for coupling the communications module to a proximal end of a network medium, the network medium having a distal end coupled to a network device operable as a link partner to the first host system; and

an adaptive protocol handler configured for identifying a variety of communications protocols used by the variety of host systems, the adaptive protocol handler operable to communicate with the host communications controller for identifying a first communications protocol used by the first host system, the adaptive protocol handler further operable to use the identified first communications protocol for establishing a communications link between the first host system and the network device, the communications link comprising a communications path through the host interface port and the network medium interface port of the communications module.

Claim 26 (New): The communications module of claim 25, further comprising:

a transceiver coupled to the network media interface port, the transceiver configured as a part of the communications path for propagating bi-directional communications through the network media interface port.

Claim 27 (New): The communications module of claim 25, wherein the adaptive protocol handler is configured to sequence through a series of different communications protocols for identifying the first communications protocol used by the first host system.